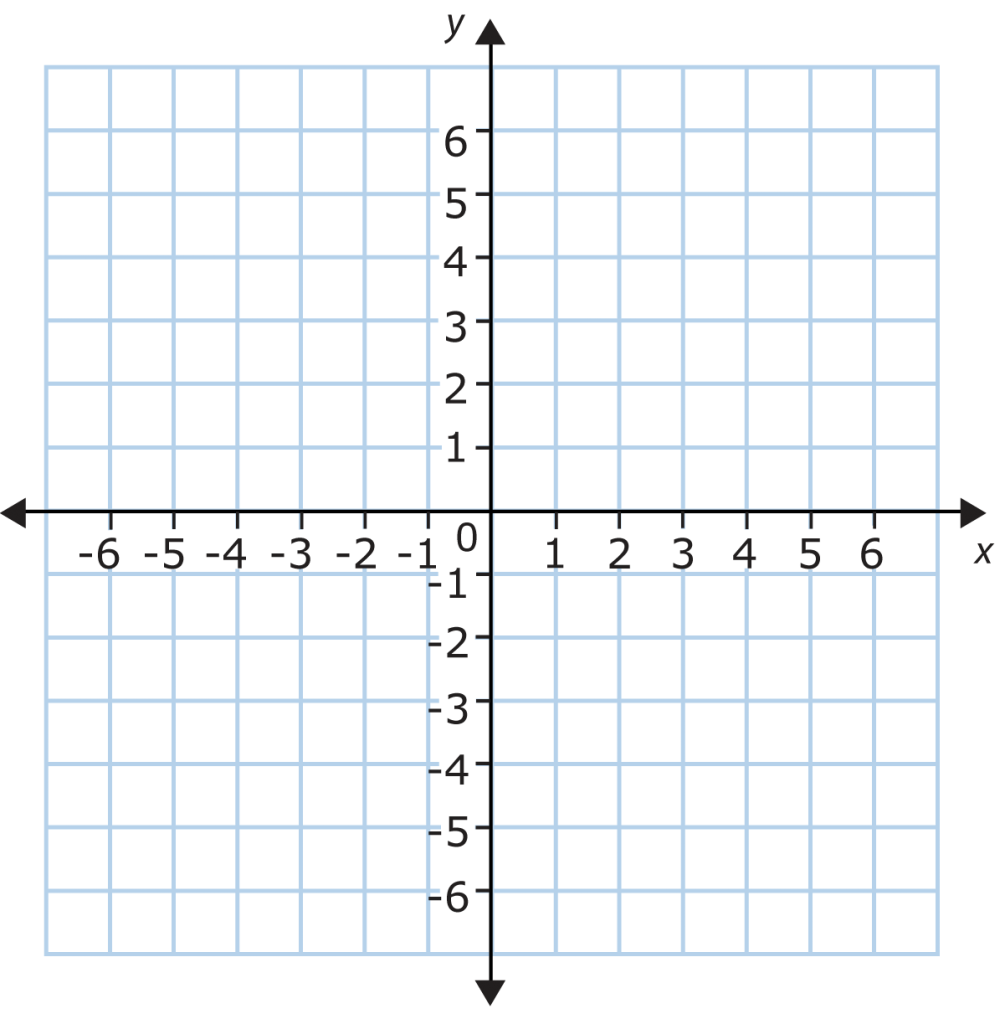
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Per.: \_\_\_\_\_\_\_\_

**Homework Unit 2 – Reviewing what we have done so far**

**2.7**

Directions: Find the midpoint and the distance of AB given: A(4, 4) and B(-2, 0).



**2.6**

Directions: Use the diagram below to answer the questions.

1. The diagram to the left is an illustration of a construction using a compass and a straight edge. What is the line drawn through AB called?

2. Fill in the missing steps to create a perpendicular bisector of a segment, given a compass and a straight edge.

A. Place the compass point on one end of the line segment.

B. Stretch the compass width to more than half of the line segment.

C. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

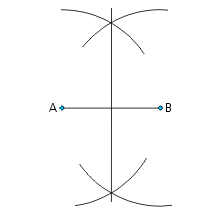
D. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

E. Draw an arc above the line segment and draw an arc below the line segment.

F. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**  
2.5 – LOOK AT YOUR 2.5 PACKET SO YOU CAN FOLLOW THE FOUR STEPS!**

Directions: Find the length of the indicated segment. CAREFUL! Do not assume a given point is a midpoint unless it is stated.

1.

****

2. Z is the midpoint of XY. XZ = 6*x* – 4 and ZY = 2*x* + 8. Find the length of XZ, ZY, and XY.

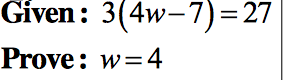


**2.4**

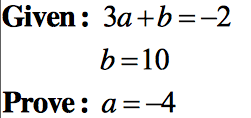
1. When do you use the congruence symbol and when do you use the equality symbol? Give at least two examples of each.

2. Find the error and correct it:

**2.3**



|  |  |
| --- | --- |
| **Statements** | **Reasons** |
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |
| 4. | 4. |
| 5. | 5. |



|  |  |
| --- | --- |
| **Statements** | **Reasons** |
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |
| 4. | 4. |
| 5. | 5. |

**2.2/2.1**

*If two angles are supplementary, then the two angles are congruent.*

1. Is the conditional above always, sometimes or never true? If it not always true, explain a counterexample.

2. Write the converse:

3. Write the inverse:

**Unit 2 connections…**

1. How are “Given” and “Prove” in a proof similar to “If” and “then” in a conditional?
2. What are two ways we have learned to find the midpoint of a line segment?
3. What is the difference between the concepts of congruence and equality?
4. How does the Pythagorean Theorem () relate to finding the distance between two points on a coordinate plane?